

Subteam 5 Subcategory Information

Subcategory Name:	Agricultural Waste Incinerators
Assigned CAA Section:	129; OSWI
Materials Combusted:	Materials from agricultural research facilities, farms, stables, oil seed plants, grain handlers, biomass facilities, and nurseries. Will include vegetable matter only.
Combustion Devices:	Insufficient information to determine at this time. Includes single- and multiple-chamber and fluidized-bed incinerators.
Basis for Bounds:	Listed as a separate OSWI category in the 11/2/93 and 12/28/94 ANPRMs. Probably includes unique fuels, controls, and emissions characteristics.
Comments:	47 records in the Inventory database. No data were found for this subcategory in the Emissions database.

Subcategory Name:	Small MWCs
Assigned CAA Section:	129; OSWI
Materials Combusted:	Municipal solid waste (MSW), which is a mixture or single-item stream of household, commercial, and/or institutional discards, including materials such as paper, wood, yard wastes, tree trimmings, plastics, leather, rubber, glass, metals, and other combustible and noncombustible materials. Includes household discards and discards from institutional and commercial sources, but does not include industrial process or manufacturing discards.
Combustion Devices:	Large population of various designs. Further analysis required.
Basis for Bounds:	MWCs with plant capacities less than 35 Mg/day are listed as a separate OSWI category in the 11/2/93 and 12/28/94 ANPRMs. Large MWCs (i.e., greater than or equal to 35 Mg/day) are covered by other rulemakings.
Comments:	<p>3,523 records in the Inventory database, which include incinerators located at schools, prisons, stores, restaurants, airports, municipalities, etc.. These records include "Residential Waste" incinerators (1,029 records), which are located at apartments, individual residences, hotels, nursing homes, etc. Note that a telephone survey of regulatory agencies in the three states (IL, MA, MI) represented by the most residential incinerators in the database concluded that most of these units are no longer in operation.</p> <p>99 records for "DOD" incinerators, which are units located at military bases (2 are actually at DOE sites, but are described as "National Security" sites), are also included. Of the 99 DOD records, 2 could be explosives/munitions incinerators.</p>

Emissions Database Entries for Small “MWCs”

Facility	Location	Test Date	Description	Size	Control(s)	Pollutant(s)/ Avg. Concentration(s)
Red Lion Inn	Bellevue, WA	2/23/89	MSW/residential	250 lbs/hr (testing rate)	Unknown	HCl: 13.2 ppm
Boeing Advanced Systems	Seattle, WA	10/31/88	MSW/industrial; Joy Energy Systems, Model 780E; burns Mylar, microfiche, paper	471 lbs/hr (testing rate)	Afterburner	HCl: 65.4 ppm
Westmoreland Manor Waste-to-Energy Facility	Greenburg, PA	9/2/87	MSW (facility has 2 John Zinc Class V, Type 2 incinerators and 2 boilers)	25 tons/day (capacity)	Electrostatic Precipitator	HCl: 605 ppm Cd: 1.2E-4 ppb Pb: 1.3E-3 ppb
General Electric	Mt. Vernon, IN	6/27/90	MSW; John Zinc, single-train, rotary kiln; burns trash, wastepaper, sludge, natural gas	2276 lbs/hr (testing rate)	Afterburner	Hg: 0.014 ppb
St. Michael's Medical Center	Newark, NJ	5/7/88	MSW & natural gas (hospital); acutally medical waste unit	308 lbs/hr (testing rate)	None	HCl: 498 ppm
Rahway Hospital	Rahway, NJ	4/15/87	MSW (hospital); actually medical waste unit	4.8 tons/day (capacity)	Unknown	HCl: 961 ppm
Montgomery County Resource Recovery Facility	Conshohocken, PA	4/6/93	MSW; 2 stoker boilers	600 lbs/day (capacity)	Lime spray dryer and fabric filter	As: 3.5 ppb Be: 0.46 ppb Cd:2.0 ppb Cr(+6):0.11 ppb Pb:6.7 ppb Hg:206 ppb Ni:1.9 ppb

Subcategory Name: Other Industrial/Commercial Waste Incinerators

Assigned CAA Section: 129; ICWI

Materials Combusted: Primarily industrial process and manufacturing discards.

Combustion Devices: Large population of various designs. Further analysis required.

Basis for Bounds: Industrial incinerators not specifically defined/listed as OSWI and not specifically assigned to another subteam.

Comments: 820 records in the Inventory database. The waste types are identified only as “industrial” or “commercial” waste. Many could be burning MSW and, if so, would be moved the small MWC subcategory. The database includes 10 records for "construction/demolition" waste units owned by construction companies, roofers, and contractors; 5 records for "concrete" units at concrete and burial vault manufacturers; 8 records for "fiberglass" units at various fiberglass products manufacturers; and 5 records for rotary kilns.

Subcategory Name: Landfill Gas Flares

Assigned CAA Section: Potential 112

Materials Combusted: Gas recovered from the decomposition of material in landfills.

Combustion Devices: Open flares without enclosures or shrouds and enclosed flares, which have enclosed fireboxes and relatively constant peak temperatures, generally controlled by limiting combustion air flow.

Basis for Bounds: The material and combustion device combination is considered sufficiently distinct from the other subcategories with respect to combustion and emission characteristics and regulatory drivers to warrant a separate subcategory.

Comments: 19 records in the Inventory database. 22 records in the Emissions database comprising tests for HCl and 45-50 organic pollutants at the following sources:

Landfill Name	Location	Number of Tests
Snohomish County Solid Waste Landfill	Snohomish, WA	2
Browning Ferris Industries: Imperial Landfill	Imperial, PA	1
King County Cedar Hills Landfill	Maple Valley, WA	14
King County Hobart Landfill	Maple Valley, WA	2
King County Enumclaw Landfill	Enumclaw, WA	2
Contra Costa Landfill/Pittsburg Landfill	CA	1